



Economics of Agriculture

Maryland Planning Directors' Roundtable

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“Buy Fresh, Buy Local, Buy In-Season”



U.S. Agriculture - 2007

- **9 states produce 50% of all agricultural products (not Maryland)**
- **14% of all farmers produce 84% of all production**
- **19 cents of every consumer dollar spent on food goes back to the farmer (2006)**



U.S. Agriculture

Trends in Local Foods in 2008

- **Marketing of local foods by farmers = \$4.8 billion (1.9% of total gross farm sales)**
 - **Direct to consumer only = \$1.2 billion**
 - **Intermediate channels only (e.g., grocery stores = \$3.6 billion)**
- **Home and community gardens - 10 to 20 billion (\$)**
 - **(10,000+ gardeners are registered on the UME Grow It, Eat It website)**



Maryland Agriculture

	<u>2010 Cash Receipts</u>	
All Commodities	\$1,719,166,000	100%
Poultry/Eggs	\$745,203,000	43%
Grains and Soybeans	\$384,507,000	22%
GH/Nursery	\$194,914,000	11%
Dairy Products	\$182,712,000	11%
Fruits and Vegetables	\$79,364,000	5%
Meat Animals	\$76,402,000	4%
Hay	\$17,677,000	1%



Maryland Agriculture

2010 Principal Crop (acres)

• Corn, Grain	430,000	33%
• Winter Wheat	135,000	10%
• Soybeans	465,000	35%
• Barley	34,000	3%
• Hay, All	215,000	16%
• Fresh Vegetables	11,580	1%
• Nursery (2007)	20,443	2%
Total	1,311,023	100%

Organic certified acreage = 7,625 .5%



Changes in Maryland Agriculture

	<u>Farmers</u>	<u>Farm Acres</u>	<u>Female Farmers</u>
1987	14,776	2,396,629	1,422 (9.6%)
2007	12,834	2,051,756	2,216 (17.3%)

Sixty percent of undergraduates at the College of Agriculture and Natural Resources, UMD are female



Changes in Maryland Agriculture

Pleasure/Racing

Horses

Milk Cows

1950

41,000

236,000

2010

79,100

54,000



Changes in Maryland Agriculture

	<u>Sept 2005</u>	<u>Sept 2012</u>
Corn (\$/bu)	\$2.10	\$7.92
Soybeans (\$/bu)	\$5.44	\$16.76

*Why higher prices?***

U.S. Ethanol Production	14.4%	40.5%
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U.S. Bio-Diesel (soy oil)	7.6%	21.3%
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U.S. Drought

Increased incomes in India and China

****Same relative changes in U.S. prices**



Changes in Maryland Agriculture – Increased Interest in Local Food Production

Maryland farmers say.....

“The problem is the lack of supply, not the demand for local foods”

Jack Gurley, Baltimore County

“Because of the demand for local foods, we are ‘market-rich’ in Maryland”

Russell Shlagel, Charles County



Economics of Urban Agriculture (Market Gardening)

- One acre of mixed vegetables marketed through farmers markets, community supported agriculture, restaurants (taken from a 5- acre operation.)
 - Typical income/A/year (if managed well) \$20,000
 - Typical expenses/A/year (not labor) \$10,000
 - Typical profit/A/year (return to labor) \$10,000
 - Typical profit (\$/ft²) \$0.23
 - Labor hours required per acre per year 800
 - Dollar return per labor hour \$12.50
- (A normal person works about 2,000 hours a year.)

Economics of Urban Agriculture, cont.

- **According to Gardening Statistics, a 600 ft² garden should give a return of \$0.88/ft², for \$530 profit/year**
- **According to our five-acre farmer, they average \$0.23/ft², for \$50,000 profit/year.**
- **The Gardening Statistics do not include marketing and management labor, so \$0.88/ft² maybe too high**
- **In any case, there is a tradeoff between profit per ft² and total farm profit/year.**

An urban farm can be incredibly productive on small acreage. But, will land and labor limitations preclude people from making a living as urban farmers?